

Commonwealth of Massachusetts Division of Fisheries & Wildlife Route 135 Westborough, MA 01581 (508) 792-7270 ext. 200

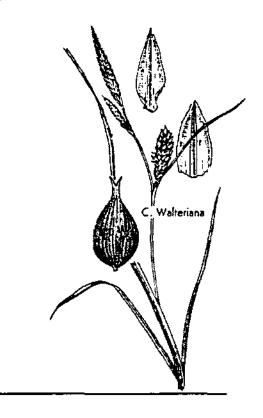
#### MASSACHUSETTS ENDANGERED PLANTS

#### WALTER'S SEDGE

(Carex striata var. brevis L. Bailey)

# <u>Description</u>

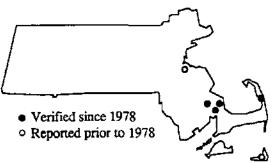
Walter's sedge, a variety of the species Carex striata, is a pale-green, narrow-leaved, grass-like perennial that often forms extensive colonies. The sharply angled stems, or culms, rise from long, slender rhizomes and reach from 4 to 12 dm (1 to 4 ft.) in height. Principal leaf blades are stiff and 2-5 mm (0.08 - 0.2 in.) wide. Like most members of the Sedge family (Cyperaceae), Walter's sedge lacks showy floral parts Each culm bears two or more spikes (elongate, unbranched inflorescences of stalkless flowers): The one to three staminate, or male, spikes are located at the top, and the one or two pistillate, or female, spikes are lower on the culm. Pistillate spikes are stalkless, or nearly stalkless, cylindric and 2-4 cm (0.8 - 1.6 in.) long. The uppermost staminate spike is 3-5 cm (1.2 - 2 in.) long. Hairless, leathery-textured, 4.5-6.6 mm (0.18 - 0.26 in.) long perigynia (sac-like structures that enclose the pistil) taper to a shallowly two-toothed beak. The pistillate scales, which subtend each of the female flowers, are red-purple on their sides. The lowest bract (modified leaf associated with a



Gleason, H.A. The New Britton and Brown Illustrated Flora of the US & Adjacent Canada. NY Botanical Garden, 1952.



Documented Range of Walter's Sedge



Massachusetts Distribution by Town

flower or inflorescence) reaches above the end of the culm. The achene (a type of dry, one-seeded fruit) is three-angled and widest at the middle. Mature fruits form in August.

### <u>Range</u>

The documented range of Walter's sedge is the coastal plain from southeastern Massachusetts to northern Florida.

### Similar Species

Slender woolly-fruited sedge (Carex lasiocarpa) could easily be mistaken for Walter's sedge. However, slender woolly-fruited sedge has pubescent (hairy) perigynia; those of Walter's sedge are hairless.

## Habitat in Massachusetts

In our area, Walter's sedge prefers boggy pondshores and open peaty swamps. Specific habitats include the upper border of a sandy beach, a pondshore with peaty-muddy substrate, a shrub bog with a wet pool, a former shrub bog that has been partially cleared, and a peat bog in a cranberry reservoir. Among the plant species associated with Walter's sedge are leather-leaf (Chamaedaphne calyculata), cranberry (Vaccinium macrocarpon), dwarf huckleberry (Gaylussacia dumosa), the sedge small-headed beak-rush (Rhynchospora capitellata), and various rushes (Juncus spp.). Rare Massachusetts plants that have been found with Walter's sedge include the following coastal plain pond species: inundated horned-sedge (Rhynchospora inundata), Plymouth gentian (Sabatia Kennedeyana), and terete arrowhead (Sagittaria teres).

## Population Status

Walter's sedge is presently listed as "Endangered" in Massachusetts, where there are five current stations (discovered or relocated since 1978) in four towns and four historical stations (unverified since 1978). (Two towns contain both historical and current sites and are represented by a single black dot on the town distribution map.) All current stations are in Plymouth or Barnstable counties. Threats to the species include land development and crushing by both foot traffic and boats. Walter's Sedge is also considered rare in New York and Rhode Island.